2. Incumbent LEC Provision of a Network Element is "Necessary" Unless the Element is, as a Practical Matter, Available for Lease from an Alternative Source

As noted previously, the U.S. Supreme Court directed the Commission to define the term "necessary," as used in Section 251(d)(2)(A), in a manner "rationally related to the goals of the [Telecommunications] Act."[54] The Court further directed the Commission to look outside an incumbent LEC's network for available network elements in determining whether the provision of a proprietary network element by an incumbent LEC is indeed necessary to permit the provision of a competitive service. Read together, these two mandates require provision of proprietary network elements by incumbent LECs unless such elements are practically, as opposed to theoretically, available for lease from other sources.[55] Leasing is a critical definitional element because the ability of a new entrant to deploy its own network facilities cannot, consistent with Congressional intent, be relied upon to relieve an incumbent LEC of its obligation to make a proprietary network element available on an unbundled basis.

The Commission has long recognized that there is a substantial difference between market place realities and theoretical models. Thus, for example, the Commission has held that market contestability cannot substitute for actual competition.[56] As the Commission remarked in implementing Section 251, "the removal of statutory and regulatory barriers to entry into the local

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54 AT&T Corp., et al. v. Iowa Utilities Board, 119 S.Ct. 721 at 734.

55 If a network element is not "proprietary in nature," the Commission need not consider whether it is available for lease from a source other than an incumbent LEC in directing the incumbent LEC to make the element available on an unbundled basis to competitive providers.

56 *See, e.g.,* Ameritech Operating Companies: Petition for Declaratory Ruling and Related Waivers to Establish a New Regulatory Model for the Ameritech Region (Memorandum Opinion and Order), 11 FCC Rcd. 14028, ¶ 72 (1996).

exchange and exchange access markets, while a necessary precondition to competition, is not sufficient to ensure that competition will supplant monopolies."[57] And the experience of resale carriers in the wireless industry confirms that the mere existence of multiple facilities-based providers guarantees neither the availability of wholesale service offerings nor interconnection or access to network facilities.[58] As the Commission is aware, facilities-based wireless carriers, despite their expanding numbers, continue to resist resale, as well as switch-to-switch interconnectivity with resale carriers.[59]

The mere presence of facilities-based competitive LECs in a given market, therefore, does not mean that alternative sources of network elements will be available to non-facilities-based competitors. Competitive LECs, unlike incumbent LECs, are under no legal obligation to make their network facilities available on an unbundled basis to competitors. And for the foreseeable future, market forces are unlikely to drive facilities-based competitive LECs in this direction. Indeed, the better business judgment in a market characterized by limited competition might well be for established competitive LECs to affirmatively avoid facilitation of additional competitive entry.

There, hence, is no magic number of facilities-based competitors whose mere presence in a market, without more, can support a claim that competitors can obtain network elements from sources other than the incumbent LEC. It matters little if there are five or ten or even twenty

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[57] Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (First Report and Order), 11 FCC Rcd. 15499 at ¶ 10.

[58] *See, e.g.,* Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services (Second Notice of Proposed Rulemaking), 10 FCC Rcd 10666 (1995).

[59] *See, e.g.,* Personal Communications Industry Association's Broadband Personal Communications Services Alliance's Petition for Forbearance for Broadband Personal Communications Services, 13 FCC Rcd 16857 (1998).

competitive LECs who have deployed facilities in a given market if none of these entities is willing to provide those facilities to competitors as unbundled network elements. For it no longer to be "necessary" for an incumbent LEC to provide access to a proprietary network element in any given market, one or more entities in that market must actually be offering unbundled access to the network element to all requesting carriers.

As noted above, however, the alternative source for a given network element cannot be an equipment supplier. As the Commission has recognized, Congress identified three "co-equal" paths of entry into the local market, . . . neither explicitly nor implicitly express[ing] a preference for one particular entry strategy.[60] While one of those paths was physical deployment of network facilities, another was reliance upon UNEs obtained from the incumbent LEC. And as the Commission concluded, and the Supreme Court confirmed, "Congress did not intend section 251(c)(3) to be read to contain any requirement that carriers must own or control some of their own local exchange facilities before they can purchase and use unbundled elements to provide a telecommunications service." "Such a limit," the Commission explained, "would seriously inhibit the ability of potential competitors to enter local markets through the use of unbundled elements, and thus would retard the development of local exchange competition."[61]

If Congress had intended for facilities construction and deployment to render unnecessary provision by an incumbent LEC of unbundled access to its network, it certainly would not have bothered to provide for three distinct market entry strategies; two would have been more than adequate. Since an entire local network, including loop plant, can be replicated, the theoretical

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60 Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (First Report and Order), 11 FCC Rcd. 15499 at ¶ 12.

61 Id.

ability of all new entrants to secure through facilities acquisition and network construction any or all of the network elements they might otherwise have requested from an incumbent LEC would render Section 251(c)(3)'s network unbundling requirement a nullity if such facilities acquisition and construction were deemed sufficient to satisfy Section 251(d)(2)(A)'s "necessary" standard.[62] Congress, however, did not envision all competitors entering the market with "fully redundant networks in place."[63] Rather it recognized that "because the investment necessary . . . [was] so significant, . . . [s]ome facilities and capabilities (*e.g.*, central office switching). . . [would] likely need to be obtained from the local exchange carrier as network elements pursuant to new section 251."[64] Thus, Congress required all incumbent LECs to provide "nondiscriminatory access to network elements on an unbundled basis at any technically feasible point . . . [and] in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service."[65]

3. The Commission Need Only Introduce the Concept of Materiality Into Its Existing Interpretation of the Term "Impair"

In assessing the Commission's reading of Section 251(d)(2)(B), the U.S. Supreme Court complained only that the Commission had erroneously assumed that "*any* increase in cost (or

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[62] Id. at ¶ 287 ("in theory, any new entrant could provide all of the elements in the incumbents' networks").

[63] Joint Explanatory Statement of the Committee of Conference, H.R. Rep. No. 104-458, 104th Cong., 2nd Sess. at 148.

[64] Id. "Congress made it possible for competitors to enter local markets through the purchase of unbundled elements because it recognized that duplication of an incumbent's network could delay entry, and could be inefficient and unnecessary." Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (First Report and Order), 11 FCC Rcd. 15499 at ¶ 287.

[65] 47 U.S.C. § 251(c)(3).

decrease in quality) imposed by denial of a network element . . . [would] caus[e] the failure to provide that element to 'impair' the entrant's ability to furnish its desired service."[66] As explained by the Court, "[a]n entrant whose anticipated annual profits from the proposed service are reduced from 100% of investment to 99% of investment . . . has not *ipso facto* been 'impair[ed] . . . in its ability to provide the services it seeks to offer."[67] In other words, the Court appears to be seeking the introduction of some sense of materiality into the "impair standard."[68]

The Court directs the Commission, in implementing Section 251(d)(2)(B), to apply the "ordinary and fair meaning" of the term "impair," "taking into account the objectives of the [Telecommunications] Act." The Commission cited that ordinary and fair meaning in its *Local Competition Order*, noting that "[t]he term 'impair' means 'to make or cause to become worse; diminish in value."[69] The Court did not quarrel with this assessment; rather it objected only to the narrowness with which the Commission applied the perspective. Likewise, the Court did not question the Commission's view that "an entrant's ability to offer a telecommunications service is 'diminished in value' if the quality of the service the entrant can offer, absent access to the requested element, declines and/or the cost of providing the service rises."[70] Instead, it objected to the absence of a sense of proportionality in the Commission's determination of what constitutes value diminution sufficient

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66 AT&T Corp., et al. v. Iowa Utilities Board, 119 S.Ct. 721 at 734 (emphasis in original).

67 Id.

68 As noted previously, the Commission need not consider whether the failure of an incumbent LEC to provide on an unbundled basis a network element which is not "proprietary in nature"would impair the ability of a competitor to provide local service in directing incumbent LECs to provide unbundled access to that network element.

69 Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (First Report and Order), 11 FCC Rcd. 15499 at ¶ 285.

70 Id.

to rise to the level of "'impair[ment]' of the ability to 'provide . . . services'."[71] As declared by the Court, "the Commission's assumption that *any* increase in cost (or decrease in quality) imposed by denial of a network element . . . [would] caus[e] the failure to provide that element to 'impair' the entrant's ability to furnish its desired service is simply not in accord with the ordinary and fair meaning of . . . [that] term[]."[72]

TRA submits that to give "substance" to the "impair standard" as directed by the Court, the Commission need only introduce the concept of materiality into its implementation of that standard. In other words, "any" diminution in value is, in the Court's view, insufficient to "establish[ment of] . . . an 'impair[ment]' of the ability to 'provide . . . services'."[73] "Some" limitation, according to the Court, is required.[74] A material adverse impact would appear to satisfy the concerns expressed by the Court and more.

In applying this materiality threshold, TRA urges the Commission to continue to view "impairment" in non-monetary, as well as monetary, terms, treating a diminution in the quality of the service a competitor can offer as every bit as consequential as an increase in the cost of providing service. Certainly, if a competitor's cost would increase materially if it were forced to obtain a network element from a source other than an incumbent LEC, its ability to provide service would be impaired. Impairment, however, can take many other forms.

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71 AT&T Corp., et al. v. Iowa Utilities Board, 119 S.Ct. 721 at 734.

72 Id. at 735 (emphasis in original).

73 Id. at 734.

74 Id.

In evaluating these non-monetary impacts, TRA urges the Commission to bear in mind the integrated nature of incumbent LEC networks. It is from this integration that the incumbent LECs realize the "economies of density, connectivity, and scale" which the Telecommunications Act requires them to share with competitive providers.[75] Introducing foreign elements into such integrated wholes will necessarily impact competitors in an adverse manner unless incumbent LECs cooperate fully in integrating the foreign components, treating them as if they were elements of their own networks. For example, if an incumbent LEC typically interconnects or operationalizes network elements using automated or mechanized provisioning systems, equivalent systems must be implemented for interconnecting or operationalizing foreign elements, if impairment is to be avoided. To date, such cooperation has been notably absent and there is little reason to believe that this state of affairs will change anytime soon. Ready interchangeability of incumbent LEC and competitively-supplied network elements, therefore, is highly unlikely.

TRA submits that non-monetary impairment of a competitor's ability to provide service can take any of the following forms, among others:

- Time to market delays: Obtaining a network element from a source other than the incumbent LEC may generate material delays as a result of inadequate inventories, protracted negotiations, inefficient distribution channels, or like concerns, thereby slowing a competitor's market entry, limiting degree of penetration and interfering with cash flow.

- Increased complexity: Utilizing UNEs from multiple sources may require a competitor to deal with multiple interfaces, differing technical capabilities, disparate provisioning systems and the like, increasing substantially the level of

[75] Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (First Report and Order), 11 FCC Rcd. 15499 at ¶ 11.

complexity with which a competitor must cope, thereby taxing financial and personnel resources.

- Market reduction: UNEs provided by non-incumbent LECs may limit the geographic coverage of a competitor's service, thereby denying the competitor access to customers and resultant revenues.

- Service quality diminution: A UNE obtained from a source other than an incumbent LEC may not allow a competitor to provide service of equal quality to that provided by incumbent LECs – *e.g.,* causing greater dial tone delay, higher blocking rates, elevated noise levels, increased failure rates -- thereby aggravating customer attrition.

- Reduced service diversity: A UNE obtained from a source other than an incumbent LEC may not allow a competitor to provide service of comparable functionality – *e.g.,* stutter dial tone or message waiting indicator -- thereby hindering the ability of the competitor to offer a viable competitive option.

Each of these non-monetary sources of service diminution is potentially material. If material in its adverse impact, any of these non-monetary sources if service diminution should be sufficient unto itself to warrant retention of an incumbent LEC's obligation to provide unbundled access to its network.

C. The Commission Should Consider the Impact on Small Carriers in Determining Which Network Elements Incumbent LECs Must Make Available on an Unbundled Basis

Section 251(d)(2) anticipates that the Commission may consider factors beyond the "necessary and impair" standards in "determining what network elements should be made available for purposes of subsection (c)(3)." TRA urges the Commission, as it did in implementing Section 251 and the other local telephony provisions of the Telecommunications Act, to continue to consider the impact of such implementation on small carriers. Certainly, such an analysis would be consistent with express Congressional intent.

The Commission is under a statutory mandate to foster greater participation by entrepreneurs and other small businesses in the provision and ownership of telecommunications services . . ."[76] As the Commission has recognized, "small businesses represent only a small portion of the businesses in telecommunications."[77] To address the under-representation of small businesses in telecommunications, the Commission, noting its "strong commitment" to achieve the goals of Section 257 of the Telecommunications Act, has "acted to identify and eliminate market entry barriers for small businesses, to remove or reduce impediments, and to increase opportunities for small business participation in the telecommunications market."[78] Certainly, erecting new and substantial barriers to entry and continued participation by small businesses in the interexchange market would not be consistent with this laudable approach.[79]

In identifying a national list of the seven unbundled network elements incumbent LECs, at a minimum, must provide, the Commission took into account the unique concerns of small carriers. The Commission acknowledged generally and sought to mitigate "the inequality of bargaining power between incumbents and new entrants," recognizing that as "monopoly providers," incumbent LECS have strong incentives to resist," among other things, the obligation to "provide

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76 47 U.S.C. § 257.

77 Section 257 Proceeding to Identify and Eliminate Market Entry Barriers for Small Businesses (Report), 12 FCC Rcd. 16802, ¶ 5 (1997).

78 Id. at ¶ 2 (1997).

79 The Commission has recognized that "financial obstacles create substantial impediments to small business entry in the telecommunications market." Section 257 Proceeding to Identify and Eliminate Market Entry Barriers for Small Businesses (Report), 12 FCC Rcd. 16802 at ¶ 42.

. . . access to unbundled elements on rates, terms, and conditions that are just, reasonable, and nondiscriminatory."[80] The Commission, however, was particularly sensitive to the impact of its rules on small carriers.

Thus, the Commission noted that "national rules will greatly reduce the need for small carriers to expend their limited resources securing their right to . . . network elements to which they are entitled under the 1996 Act."[81] "National requirements for unbundled elements," the Commission continued, would "allow new entrants, particularly small entities, seeking to enter local markets on a national or regional scale to take advantage of economies of scale in network design."[82] As explained by the Commission, "[i]f fifty states were to establish different unbundling requirements, new entrants, including small entities, could be denied the benefits of scale economies in obtaining access to unbundled elements."[83] Moreover, the Commission remarked, national UNE requirements would reduce small carriers' arbitration/litigation costs, as well as enhancing the ability of small carriers to raise capital.[84]

TRA strongly urges the Commission to factor the interests of small competitive providers into the Section 251(d)(2) calculus. Elimination of any of the seven listed UNEs would effectively deny small carriers the benefits of a UNE-based entry strategy. As discussed earlier, small carriers who opt for such an entry strategy tend to use UNEs exclusively in most, if not all, of their

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80 Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (First Report and Order), 11 FCC Rcd. 15499 at ¶ 55.

81 Id. at ¶ 61.

82 Id. at ¶ 242.

83 Id.

84 Id.

markets. Thus, loss of a single UNE would create a gaping hole in the virtual networks these carriers use to provide local service.

D. Application of the Above-Detailed Standards Requires Retention of the Existing National List Of Unbundled Network Elements

TRA submits that the determination of the network elements to which the Commission should continue to require incumbent LECs to provide unbundled access throughout the nation is relatively straightforward under the "necessary and impair" and other standards detailed above. Certainly, the Commission was correct in tentatively concluding that it "should continue to identify a minimum set of network elements that must be unbundled on a nationwide basis."[85] As the Commission points out, "nothing in the Supreme Court's decision . . . calls into question . . . [the Commission's] decision to establish minimum national unbundling requirements."[86] Hence, the Commission should, for all the notable reasons it cited in initially adopting its minimum list of seven unbundled network elements, reaffirm this approach. Geographic variations, to the extent they exist, or more accurately, to the extent they come to exist, will involve "fact-intensive questions" that must necessarily be dealt with on a case-by-case, market-specific basis.[87] TRA will recommend procedures for such case-by-case review in a subsequent section of these comments.

Two factors confirm the appropriateness of the Commission's retention of the existing national list of seven unbundled network elements. First, as discussed previously, the

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85 FNPRM, FCC 99-70 at ¶ 14.

86 Id.

87 Id. at ¶ 12.

Commission has already determined that the large majority of the seven listed elements raise no proprietary concerns and hence require no additional assessment under Section 251(d)(2). More critically, however, there are substantial sectors of the nation in which no competitive LECs are currently operating. In such sectors, there exist no alternative sources from which network elements can be leased. Thus, unless a competitive provider acquires and deploys its own facilities -- an option which, as discussed above, cannot be relied upon to satisfy the "necessary" standard consistent with Congressional intent in providing for three co-equal entry vehicles – it will have no means of obtaining network elements other than through the incumbent LEC pursuant to Section 251(c)(3).

Attached hereto as Appendix I is a map prepared by The Strategis Group, Inc. ("Strategis") which highlights, by Basic Trading Area ("BTA") and number of entities, those areas in which competitive LECs are currently operating. As is apparent from the Strategis presentation, there are large areas of the country in which no competitive providers are present. In fact, there are more BTAs in which the incumbent LEC remains the sole provider of local service than there are areas in which the incumbent faces competition. In the former BTAs, there are no alternative sources from which network elements can be obtained; indeed, even in those BTAs in which competitive LECs are operating, there is no assurance that they are facilities-based or, if facilities-based, that they will voluntarily provide competitors with unbundled access to their network facilities.

Unless the Commission retains its full national list of seven unbundled network elements, new entrants in any of the currently unserved areas will be denied the ability to provide facilities-based service without being required to deploy their own network facilities. If Congress intended for this to be the case, it certainly would not have bothered to include Section 251(c)(3) in the Telecommunications Act. Resale and network interconnection would have been the sole identified market entry vehicles. The Commission, however, envisioned a different construct:

> It is also possible, however, that other local markets, now and even into the future, may not sufficiently support duplication of all, or even some, of an incumbent LEC's facilities. Access to unbundled elements in these markets will promote efficient competition for local exchange services because, under the scheme set out in the 1996 Act, such access will allow new entrants to enter local markets by obtaining use of the incumbent LECs' facilities at prices that reflect the incumbents' economies of scale and scope.[88]

Or put more succinctly, "the ability of new entrants to use unbundled network elements, as well as combinations of unbundled network elements, is integral to achieving Congress' objective of promoting competition in the local telecommunications market."[89]

E. The Commission Should Establish Standards and Procedures for Case-By-Case, Market Specific Application of the "Necessary and Impair" Standards

Having retained, as it must, the existing minimum list of seven unbundled network elements, TRA urges the Commission to take this opportunity to establish procedures through which an incumbent LEC may demonstrate that in a given market, its provision of a given non-proprietary network element is no longer necessary and its refusal to provide the element would not materially adversely impact the ability of requesting carriers to provide local service. In so doing, the

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88 Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (First Report and Order), 11 FCC Rcd. 15499 at ¶ 232.

89 Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, to Provide In-Region, InterLATA Services in Michigan (Memorandum Opinion and Order), 12 FCC Rcd. 20543, ¶ 332 (1997).

Commission should detail the standards that an incumbent LEC must satisfy, including the presumptions it must overcome, to obtain such relief. The Commission should further define the extent of the relief that may be granted, clarifying, in particular, the impact of such relief on existing service arrangements and interconnection agreements. Finally, the Commission should adopt meaningful penalties to guard against frivolous applications which are designed to drain the resources of competitive carriers.

1. **State Commissions Should Ultimately Assume an <u>Adjudicative Role Subject to Commission Review</u>**

In establishing procedures by means of which an incumbent LEC may demonstrate that in a given market, its provision of a given non-proprietary network element is no longer necessary and its refusal to provide the element would not materially adversely impact the ability of requesting carriers to provide local service, TRA recommends that the Commission provide roles for itself, as well as individual state commissions. A balance must be struck in this regard, providing a meaningful opportunity for incumbent LECs to seek relief where appropriate, without creating a means by which the incumbent LECs can use their seemingly limitless litigation resources to drain the financial and personnel resources of their generally much smaller competitors through frivolous filings. At the same time, efforts should be made to tap the expertise of both the Commission and the various state commissions, while preserving the force of national guidelines.

With these parameters in mind, TRA recommends that all applications for Section 251(d)(2) relief should be directed to and heard by the Commission for a minimum of two years. The Commission should make clear that all such applications must be legitimate requests for relief, with strict penalties levied for applications which fail on their face to meet identified evidentiary thresholds. Rather than monetary forfeitures, which have little impact on entities as well-financed as the major incumbent LECs, such penalties should be bars against submission for some designated period of time of further applications for relief.

All applications for Section 251(d)(2) relief should be noticed for public comment and granted or denied within a discrete period of time, applying the standards and evidentiary presumptions adopted in this proceeding. Commission decisions should provide additional guidance as to the meaning and applicability of these standards and evidentiary presumptions. At the end of the interim two year period, or such longer time frame as the Commission may deem appropriate, a body of law adequate to guide state commissions should have developed.

Critical to the viability of this adjudicatory scheme is an absolute prohibition on unilateral action by incumbent LECs to withhold the availability of any network element in any market. If incumbent LECs can deny unbundled access to a network element without first being authorized by the Commission to do so, they will be able to wreak havoc among competitive providers. If competitive LECs were compelled to litigate simply to obtain access to a given network element, being forced to operate in the interim without such access, they will be the ultimate losers in the confrontation irregardless of the outcome of the litigation because their marketing efforts would be crippled while the matter is being heard. Incumbent LECs would be able to defeat competition by manipulating regulatory forums rather than having to face it in the marketplace.

TRA envisions state commission thereafter assuming the principal adjudicatory role, receiving and evaluating incumbent LEC Section 251(d)(2) applications and oppositions thereto. In this role, state commissions would apply the standards promulgated, and refined through two or more years of application, by the Commission. State commission decisions would be appealable to the Commission, which would reserve the right to stay such determinations as are facially not in compliance with national standards. State commissions would be able to bring to bear their expertise with respect to local market conditions, while the Commission would maintain a national perspective.

The Commission's initial role as primary adjudicator and its subsequent appellate role are critical elements of an adjudicatory scheme designed to avoid abuses while providing full opportunity for incumbent LECs to be heard. If state commissions were to assume the role of primary or exclusive adjudicators, incumbent LECs could thwart competitors by filing an avalanche of Section 251(d)(2) applications in 50 plus forums. Competitive carriers, particularly small competitors, simply do not have the resources to respond to such an ongoing deluge of paper. Likewise, absent centralized review of state commission decisions by the Commission, incumbent LECs could distort the national standards by persuading more receptive state commissions to simply ignore the Commission's determinations.

The final element of the adjudicatory scheme envisioned by TRA is the extent of the relief that incumbent LECs could secure. In order to avoid market disruptions, it is critical that all relief be prospective in nature. Consistent with this approach, the granted relief must not effect either UNE-based service arrangements currently being provided by competitive LECs to customers or existing interconnection agreements with competitive LECs.

2. Standards and Presumptions Must be Articulated in Detail and Refined Through Application

Critical to the fairness of the Commission's review of incumbent LEC Section 251(d)(2) applications, and even more so to reliance upon state commission adjudication of these applications, is the adoption of a clear and detailed set of national standards and presumptions applicable to such applications. TRA recommends that these standards and presumptions reflect the interpretations of the terms "proprietary," "necessary," and "impair," as well as the additional small carrier impact standard, discussed in preceding sections of these comments.

Given the anticipated retention by the Commission of its existing national unbundling requirements, TRA believes that there must be an initial presumption that access to all listed elements is necessary and that the unavailability of any of these elements would impair the ability of competitive LECs to provide service. It would be incumbent upon any incumbent LEC seeking to be relieved of its unbundling obligations with respect to a given network element in a given market to make a *prima facia* showing of the practical availability of the network element to overcome this presumption. That showing, as discussed previously, could not be limited to a mere demonstration that competitive LECs were operating in the market. Rather, the petitioning incumbent LEC would have to show that network elements were available for lease to any and all requesting carriers from one or more sources other than the incumbent LEC. It is critical that the showing involve availability to all requesting carriers if small carriers are not to be left out of the evaluative calculus. Further from a small carrier perspective, it is also critical, as discussed above, that leasing, not facilities acquisition and deployment, be the determinative element.

Only if an incumbent LEC could demonstrate the existence of an active network element leasing market would it overcome the presumption that unbundled access to its network remains necessary. An application which failed to make this threshold showing would be subject to summary denial and application of sanctions. Those applications which did made the requisite showing, however, would be reviewed under the "impair," and any additional standards adopted by the Commission, including the small carrier impact standard recommended by TRA. Although the incumbent LEC would no longer be presumed to be the sole source of the network element, as the party seeking relief under Section 251(d)(2), it would still bear the burden of proof.

To satisfy the impair standard, the incumbent LEC would be required to demonstrate that use of network elements leased from alternative sources would not materially and adversely impact the ability of competitors, both large and small, to provide local service. Such material, adverse impacts could be either monetary or non-monetary in nature. Thus, if an incumbent LEC could not establish that use of a network element leased from an alternate source would not materially increase either competitors' costs or the complexity of their operations, or materially diminish the quality, functionality, diversity, scope, or timeliness of competitors' service offerings, its application for Section 251(d)(2) relief with regard to that network element would fail. It is critical that any material impairment prompt denial. Thus, any material increase in cost, or material rise in complexity, or material diminution in service quality, or material reduction in addressable market, or material increase in time to market, standing alone, would require continued unbundled access to all segments of the petitioning incumbent LEC's network.

Certainly, a petitioning incumbent LEC could not be required to prove a negative. Just as the incumbent LEC would have to introduce evidence of ready interchangeability of network elements, so too would competitive LECs have to come forward with evidence of impairment. The incumbent LEC, however, would be in a position to show that it had implemented non-discriminatory UNE-provisioning systems designed to ensure the transparent and seamless substitution of competitively-supplied network components for its own network elements. If it could not do so, the likelihood of material impairment would be high. Moreover, because an active wholesale UNE market is effectively a prerequisite to Section 251(d)(2) relief, any elements an incumbent LEC might seek to remove from the unbundling list would by necessity be interconnected and operating in tandem with the incumbent LEC's network. The incumbent LEC would thus have a window to the capabilities of any competitively-supplied network elements.

F. Application of Standards to Selected Network Elements

1. Local Switching

In light of press reports that the incumbent LECs and even some facilities-based competitive LECs intended to argue that the local switching element could be removed from the mandatory unbundling list without inflicting competitive damage on non-facilities-based competitive providers, TRA commissioned the Competitive Communications Group ("CCG") to undertake a study of the availability for lease of local switching capability from sources other than incumbent LECs, the cost of switch deployment relative to use of incumbent LEC local switching, and the additional operational complexities use of non-incumbent LEC switching capability would entail for small carriers. CCG's analysis, which is attached hereto as Appendix 2, confirms the critical importance of continued unbundled access by non-facilities-based competitive providers to incumbent LEC local switching capability.

At TRA's request, CCG conducted a survey of the twenty competitive LECs which have currently deployed facilities in the New York metropolitan area. The New York metropolitan area was selected because it is generally acknowledged to be the most competitive local market in the country, and certainly evidences one of the highest concentrations of facilities-based competitive providers.[90] CCG queried the twenty facilities-based competitive LECs with respect to their plans for leasing switching services to other competitive providers, both in New York and elsewhere, to determine whether a certain universe of suppliers would necessarily generate a wholesale market for switching capability. The data collected by CCG confirms that no threshold number of facilities-based competitors translates into the availability of switching alternatives for non-facilities-based local providers.

Of the twenty facilities-based competitive LECs interviewed by CCG, not one claimed to be both willing and prepared to lease switching on a wholesale basis to other carriers. As reported by CCG, one survey respondent advised that it currently provided switch partitioning to several competitive providers, but, due largely to operational support concerns, it did not intend to renew these contracts. One respondent suggested that it was evaluating leasing its switch platform, but had not developed specific time frames, prices or any level of operations plan.

Based on its market research, CCG concluded that "[i]n New York City, it is apparent that leasing switched services from anyone other than Bell Atlantic is not a feasible alternative for a CLEC." Moreover, CCG extrapolated that "the lack of availability of switch partitioning in New City translate[s] into a lack of availability of leased switching in other markets." CCG based this assessment on the receipt of only one positive response (with respect to a single market) to its query whether the carriers interviewed in New York – which collectively provide service in at least 35 other metropolitan areas – leased switching in other markets.

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[90] *See, e.g.,* Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission, Local Competition (December, 1998).

While TRA strongly believes that facilities acquisition and deployment cannot, consistent with Congressional intent, satisfy the Section 251(d)(2)(A) "necessary" standard, it nonetheless requested that CCG undertake an analysis of the cost of leased switching versus the cost of switch acquisition to demonstrate that purchasing a switch is not a viable alternative for small carriers. CCG determined that leasing switch capacity remained more cost-effective for a competitive LEC until it had secured 12,000 lines and that the cost differential for 5,000 lines or less was dramatic. As couched by CCG, "[f]or CLECs that plan to serve smaller markets per switch, or whose large market approach is highly targeted and the likely number of customer lines will be less than 5,000, the cost argument for maintaining leased switching as an unbundled network element is compelling." By way of example, CCG notes that "[f]or a CLEC that sells 3,000 lines in a market, having the ability to lease switching reduces the CLEC's cost by over $300,000 annually." Moreover, CCG adds, "[e]ven in large markets, assuring over 5,000 customer lines per switch can be a difficult task, and one that will likely take two to three years to accomplish."

Finally, TRA asked CCG to identify the increased complexity associated with switch partitioning, assuming this option were to become available to non-facilities-based competitive providers at some point in the future. CCG prepared an extensive "summary list of the operational details that must be implemented with each location where partitioned switching would be purchased," declaring that "leasing switching from non-ILEC sources can be extremely complicated for a CLEC." As explained by CCG, the complications are exacerbated because "[m]any of the operational interfaces that are part and parcel of purchasing the switching element from an ILEC must be individually negotiated if partitioning a switch." Indeed, CCG advises that "[i]t is this complexity that has stopped most attempts at switch partitioning."

CCG cites as one example of this complexity the daunting task faced by a competitive LEC that desired to utilize switch partitioning throughout the Bell Atlantic region, if such opportunities existed, which as discussed above, they do not. Currently, 35 BTAs within the Bell Atlantic region are served by facilities-based competitive LECs. To serve all 35 BTAs, a non-facilities-based competitive LEC desirous of using switch partitioning would have to negotiate arrangements with at least six carriers. Worse yet, that non-facilities-based competitive LEC would then be required to deal with at least six operational interfaces. A graphic depiction of this increased level of complexity is attached hereto as Appendix 3.

Adding this all together produces a clear conclusion, incumbent LECs must continue to provide local switching as an unbundled network element because alternative sources for leasing switching capability simply do not exist (even where facilities-based competitive LECs are operational), it is not cost effective for small carriers to purchase and deploy their own switches, and if switch partitioning were ever to become a viable option, the complexities inherent in its use would sharply limit its attractiveness. It is not surprising that a wholesale market for local switching capability has not arisen. Competitive LECs have deployed less than 500 switches compared to the roughly 23,000 currently in use by incumbent LECs,[91] rendering alternative switching vehicles a relatively rare commodity. It is likely that the number of competitive LEC switches would have to increase dramatically before market forces begin to drive a switch partitioning market.

The Commission was correct, "a requesting carriers's ability to offer local exchange services would be impaired, if not thwarted, without access to an unbundled local switching

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91 Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (First Report and Order), 11 FCC Rcd. 15499 at ¶ 411.

element."[92] It is undoubtedly in anticipation of the critically important role unbundled local switching has and will play "in accelerat[ing] the development of local competition"[93] that Congress identified the unbundling of local switching from "transport, local loop transmission or other services" as a prerequisite to BOC provision of in-region, interLATA service.[94] It is likely also for this reason that central office switching was the sole network element cited in the Conference Report as an example of "facilities and capabilities . . . [that] will likely need to be obtained from the incumbent local exchange carrier as network elements pursuant to section 251."[95]

2. Transport

Outside of local switching, transport is the only other network element as to which even a superficially plausible case could be made that viable alternative sources of supply exist. Like most things of a superficial nature, however, the argument that incumbent LECs no longer need to make interoffice transport available as an unbundled network element is wholly without merit. Indeed, with respect to shared transport, the Commission has already undertaken the type of analysis contemplated by the U.S. Supreme Court and determined that unbundled access is essential.

Unlike local switching, "alternative suppliers of interoffice transport" existed when Congress identified the unbundling of local transport as a precondition of BOC entry into the in-

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92 Id. at ¶ 421.

93 Id. at ¶ 411.

94 47 U.S.C. § 271(c)(2)(B)(vi).

95 Joint Explanatory Statement of the Committee of Conference, H.R. Rep. No. 104-458, 104th Cong., 2nd Sess. at 148.

region, interLATA market,[96] and the Commission concluded that "unbundled access to incumbent LECs' interoffice facilities . . . is essential to . . . [a] competitor's ability to provide competing telephone service."[97] Indeed, the Commission expressly addressed the "alternative suppliers" issue, declaring that "entry [would] be facilitated if competitors have greater, not fewer, options for procuring interoffice facilities as part of their local networks," and concluding that "Congress intended for competitors to have these options available."[98] Moreover, the Commission emphasized that the ability to acquire unbundled interoffice transport from an incumbent LEC would "decrease the cost of entry compared to the *much higher cost* that would be incurred by an entrant that had to construct all of its own facilities."[99]

The Commission elaborated on these themes in addressing the unbundled availability of shared transport. Bearing in mind that the Supreme Court found fault only with the Commission's belief that "*any* increase in cost (or decrease in quality) imposed by denial of a network element . . . [would] caus[e] the failure to provide that element to 'impair' the entrant's ability to furnish its desired service,"[100] the Commission found that "the failure of an incumbent LEC to provide access to all of its interoffice transport facilities on a shared basis would *significantly increase the requesting carriers' costs* of providing local exchange service and thus reduce competitive entry into

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96 47 U.S.C. § 271(c)(2)(B)(vi).

97 Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (First Report and Order), 11 FCC Rcd. 15499 at ¶ 449.

98 Id. at ¶ 441.

99 Id. (emphasis added).

100 AT&T Corp., et al. v. Iowa Utilities Board, 119 S.Ct. 721 at 734 (emphasis in original).

the local exchange market."[101] And the Commission reiterated that "[a]n efficient new entrant might not be able to compete if it were required to build interoffice facilities where it would be more efficient to use the incumbent LEC's facilities.[102]

As if anticipating, and seeking to assure full satisfaction with, the Supreme Court's directive, the Commission continued:

> We believe that access to transport facilities on a shared basis is particularly important for stimulating initial competitive entry into the local exchange market, because new entrants have not yet had an opportunity to determine traffic volumes and routing patterns. Moreover, requiring competitive carriers to use dedicated transport facilities during the initial stages of competition would create a significant barrier to entry because dedicated transport is not economically feasible at low penetration rates. In addition, new entrants would be hindered by significant transaction costs if they were required to continually reconfigure the unbundled transport elements as they acquired customers. We note that incumbent LECs have significant economies of scope, scale, and density in providing transport facilities. Requiring transport facilities to be made available on a shared basis will assure that such economies are passed on to competitive carriers. Further, if new entrants were forced to rely on dedicated transport facilities, even at the earliest stages of competitive entry, they would almost inevitably miscalculate the capacity or routing patterns.[103]

As is apparent, the Commission has a record more than adequate to counter any claims that it is no longer "necessary" for incumbent LECs to make interoffice transport available

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101 Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (Third Order on Reconsideration), 12 FCC Rec. 12460, ¶ 34 (1997), *aff'd sub. nom.* Southwestern Bell Telephone Company v. FCC, 153 F.3d 597 (1998), *petition for certiori filed sub nom.* Ameritech Corp., et al. v. FCC, Case No. 98-1381 (Feb. 26, 1999) (emphasis added).

102 Id.

103 Id. at ¶ 35.

on an unbundled basis or that their failure to do so would materially impact the ability of competitive LECs to provide service.

3. Other Elements

No even superficially plausible argument can be made for relieving incumbent LECs of their Section 251(c)(3) argument to make the remaining elements available on an unbundled basis. Loops, for example, are the quintessential monopoly asset, underlying the "economies of density, connectivity, and scale" that the Telecommunications Act was principally designed to address.[104] Like local switching and local transport, local loops were identified by Congress as a precondition to BOC provision of in-region, interLATA service,[105] and, like local switching, local loops were singled out in the Conference Report as an example of unbundled network elements.[106] Like all other network elements, loops could theoretically be replicated, but only at enormous cost.

Likewise, because incumbent LEC switches are interconnected with their own signaling networks and cannot interoperate with multiple signaling networks, a competitive LEC that utilizes incumbent LEC switching has no choice but to utilize incumbent LEC signaling. The same is true of the incumbent LECs' call-related databases, because incumbent LEC switches are programmed to interoperate with only incumbent LEC Signaling System 7 databases.

Similarly with respect to operations support systems ("OSS"), no plausible argument can be made that substitutes for incumbent LEC OSS exist. For this reason, the Commission could

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104 Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (First Report and Order), 11 FCC Rcd. 15499 at ¶ 11.

105 47 U.S.C. § 271(c)(2)(B)(iv).

106 Joint Explanatory Statement of the Committee of Conference, H.R. Rep. No. 104-458, 104th Cong., 2nd Sess. at 116.

not have been more adamant in its assessment that "it is absolutely necessary for competitive carriers to have access to operations support systems functions in order to successfully enter the local service market,"[107] or when it declared that "competitors' ability to provide service successfully would be significantly impaired if they did not have access to incumbent LECs' operations support systems functions."[108] Indeed, so forceful were the Commission's statements that the Supreme Court cited them as an example of the Commission's application of a "higher standard."[109]

G. The Commission Could Speed the Deployment of Advanced Telecommunications Services by Expanding the List of Seven UNEs

The purpose cited by Congress for "opening all telecommunications markets to competition," was to "accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans."[110] TRA submits that the most effective means of both opening the local market to competition and of speeding the availability of advanced services is to expand the list on unbundled network elements to include elements essential to the provision of advanced telecommunications services. To this end, TRA recommends that the following adjustments be made to existing national unbundling requirements.

- The definition of local loop should be expanded to require the provision of a loop capable of supporting advanced telecommunications services and to encompass all necessary electronics.

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107 Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (First Report and Order), 11 FCC Rcd. 15499 at ¶ 521.

108 Id. at ¶ 522.

109 AT&T Corp., et al. v. Iowa Utilities Board, 119 S.Ct. 721 at 735.

110 Joint Explanatory Statement of the Committee of Conference, H.R. Rep. No. 104-458, 104th Cong., 2nd Sess. at 113.

- Switching capability should be deemed to include data, as well as voice, capabilities, expanding to include packet, as well as, circuit switching.

- The transport element should be deemed to encompass all forms of transport, including dedicated, shared and packet.

- Operations support systems should be required to provide the capabilities needed to provide and market advanced telecommunications services.

These modifications will allow non-facilities-based carriers pursuing a UNE-based service strategy to enhance delivery of advanced telecommunications services to their customers and to more effectively market such services to prospective customers.

III.

CONCLUSION

By reason of the foregoing, the Telecommunications Resellers Association urges the Commission to adopt rules in this proceeding consistent with the above comments.

Respectfully submitted,

TELECOMMUNICATIONS RESELLERS ASSOCIATION

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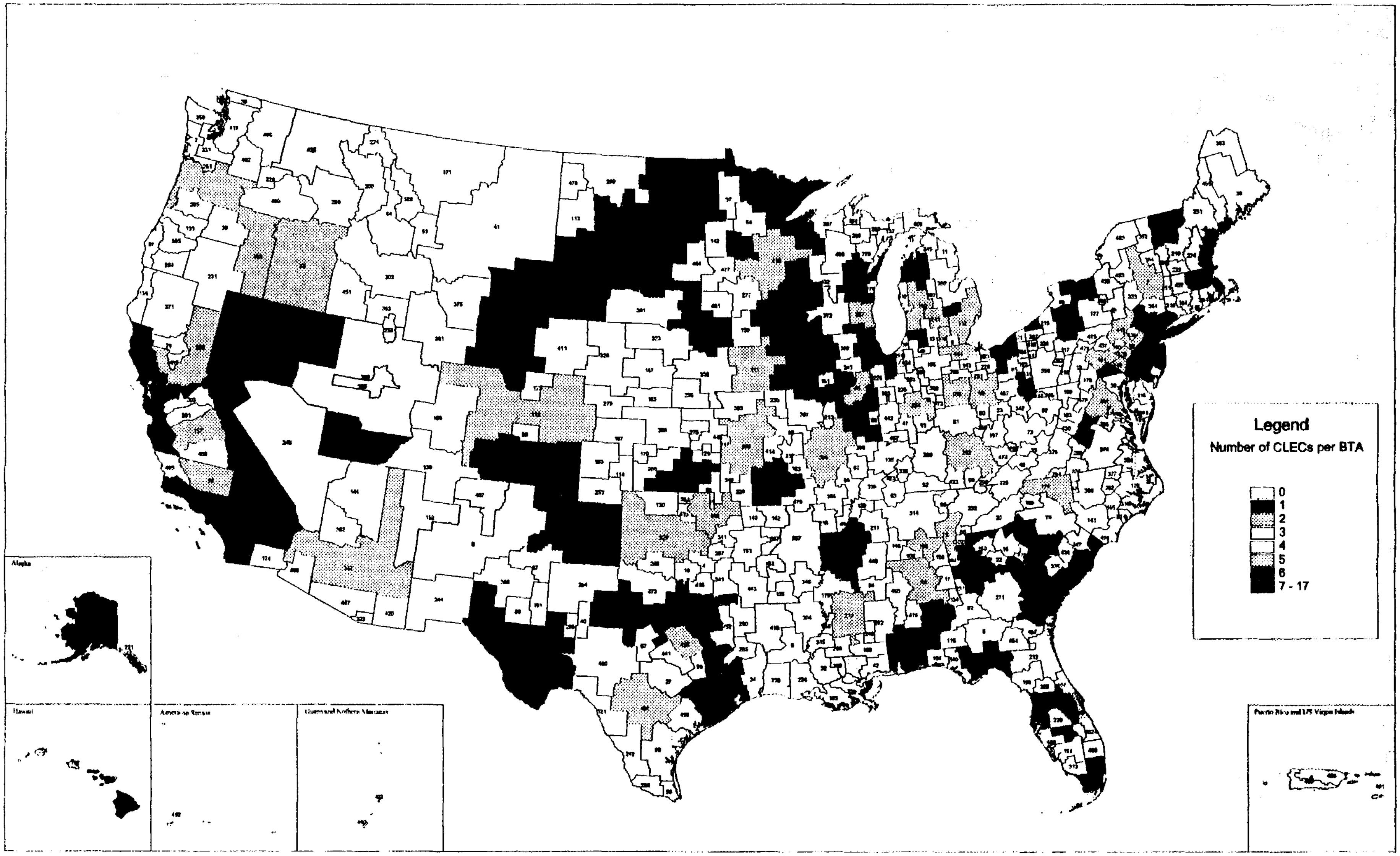
APPENDIX I

The Strategis Group, Inc. Map of
Competitive Local Exchange Carrier Operations

Telephony ScoreKeeper ™ : United States

Number of Operational CLECs per BTA



Aberdeen, SD	1	Bismarck, ND	1	Cincinnati, OH	4	Eau Claire, WI	1	Hilo, HI	1	Lancaster, PA	2	Mobile, AL	1	Phoenix, AZ	5	St. George, UT	1	Springfield, IL	1	Wichita, KS	
Abilene, TX	1	Bloomington, IL	2	Cleveland-Akron, OH	6	El Paso, TX	1	Honolulu, HI	2	Lansing, MI	2	Montgomery, AL	1	Pittsburgh, PA	4	St. Louis, MO	5	Springfield-Holyoke, MA	3	Worcester-Fitchburg-Leominster, M	
Albany-Schenectady, NY	5	Boise-Nampa, ID	2	Clinton, IA-Sterling, IL	1	Erie, PA	1	Houston, TX	6	Las Vegas, NV	1	Myrtle Beach, SC	1	Portland-Brunswick, ME	1	Salinas-Monterey, CA	1	Springfield, MO	1	York-Hanover, PA	
Albuquerque, NM	3	Boston, MA	10	Colorado Springs, CO	3	Fairbanks, AK	1	Huntsville, AL	2	Lexington, KY	2	Nashville, TN	4	Portland, OR	5	Salt Lake City-Ogden, UT	3	Stockton, CA	1		
Allentown-Bethlehem-Easton, PA	2	Buffalo-Niagara Falls, NY	4	Columbia, SC	1	Fargo, ND	1	Huron, SD	1	Little Rock, AR	3	New Orleans, LA	3	Providence-Pawtucket, RI-New Bedf	4	San Antonio, TX	5	Syracuse, NY	3		
Amarillo, TX	1	Burlington, IA	1	Columbus, OH	5	Flint, MI	1	Indianapolis, IN	5	Los Angeles, CA	9	New York, NY	14	Provo-Orem, UT	3	San Diego, CA	6	Tallahassee, FL	1		
Anchorage, AK	1	Burlington, VT	1	Corpus Christi, TX	3	Fond du Lac, WI	1	Iowa City, IA	1	Louisville, KY	3	Norfolk-Virginia Beach-Newport Ne	3	Pueblo, CO	1	San Francisco-Oakland-San Jose, C	9	Tampa-St. Petersburg-Clearwater,	6		
Appleton-Oshkosh, WI	1	Casper-Gillette, WY	1	Dallas-Fort Worth, TX	6	Fort Collins-Loveland, CO	1	Jackson, MI	2	Madison, WI	3	Odessa, TX	1	Raleigh-Durham, NC	4	Santa Barbara-Santa Maria, CA	1	Toledo, OH	2		
Atlanta, GA	8	Cedar Rapids, IA	1	Davenport, IA-Moline, IL	1	Fresno, CA	2	Jackson, MS	2	Manchester-Nashua-Concord, NH	3	Oklahoma City, OK	2	Rapid City, SD	1	Savannah, GA	1	Traverse City, MI	1		
Augusta, GA	1	Champaign-Urbana, IL	1	Dayton-Springfield, OH	2	Grand Forks, ND	1	Jacksonville, FL	4	Marshalltown, IA	1	Olean, NY-Bradford, PA	1	Reading, PA	2	Scranton-Wilkes-Barre-Hazleton,	2	Tucson, AZ	3		
Austin, TX	3	Charleston, SC	1	Decatur-Effingham, IL	1	Grand Rapids, MI	2	Janesville-Beloit, WI	1	Mason City, IA	1	Omaha, NE	3	Reno, NV	1	Seattle-Tacoma, WA	4	Tulsa, OK	2		
Bakersfield, CA	2	Charlotte-Gastonia, NC	3	Denver, CO	5	Green Bay, WI	1	Kahului-Wailuku-Lahaina, HI	1	Melbourne-Titusville, FL	2	Orlando, FL	6	Richmond-Petersburg, VA	1	Sheboygan, WI	1	Waco, TX	2		
Baltimore, MD	4	Charlottesville, VA	1	Des Moines, IA	2	Greensboro-Winston-Salem-High P	2	Kalamazoo, MI	1	Memphis, TN	6	Ottumwa, IA	1	Rochester-Austin-Albert Lea, MN	1	Shreveport, LA	1	Washington, DC	5		
Baton Rouge, LA	3	Chattanooga, TN	2	Detroit, MI	5	Greenville-Spartanburg, SC	1	Kansas City, MO	2	Miami-Fort Lauderdale, FL	7	Pensacola, FL	1	Rochester, NY	1	Sioux City, IA	1	Waterloo-Cedar Falls, IA	1		
Binghamton, NY	3	Cheyenne, WY	1	Dubuque, IA	1	Harrisburg, PA	2	Knoxville, TN	3	Milwaukee, WI	5	Peoria, IL	1	Sacramento, CA	5	Sioux Falls, SD	1	West Palm Beach-Boca Raton, FL	3		
Birmingham, AL	2	Chicago, IL	7	Duluth, MN	1	Hartford, CT	4	La Crosse, WI-Winona, MN	1	Minneapolis-St. Paul, MN	5	Philadelphia, PA-Wilmington, DE-T	6	St. Cloud, MN	1	Spokane, WA	3	Wheeling, WV	1		